## FEELING BETTER ABOUT THE SAFETY OF THE BRUSHY FORK IMPOUNDMENT?

## NEITHER DO WE.

For that reason, please contact one of the following state or federal agencies and let them know you are concerned and that someone needs to show you some proof that your concerns are not valid.

Working together, we can ensure that everything possible is being done to keep us safe and protect us from a potential Buffalo Creek or Martin County disaster.

**Thanks for your help!**

**The West Virginia DEP lists the following numbers:**

24-Hour Hotline 800-654-3312
Citizen Advocate 800-654-5227
Dust Complaints 304-926-3730
Explosions and Blasting Division 304-759-0595
Air Quality Division 304-926-3647

**Relevant Websites:**

http://www.coalimpoundment.com
(Federal Government)

http://www.dep.state.wv.us/
(W.Va. DEP)

http://books.nap.edu/books/030908251X/html/index.html
(National Academy of Sciences)

http://www.wvculture.org/history/buffcreek/bctitle.html

**United Mine Workers of America**
**8315 Lee Highway**
**Fairfax, Virginia 22031**
**703.208.7200**

## CITIZENS OF RALEIGH, BOONE AND KANAWHA COUNTIES

# Are You Aware of the DANGER in Our Own Backyard?

# Remember Buffalo Creek!

Most West Virginians are familiar with the horrible tragedy that occurred February 26, 1972 on Buffalo Creek. That's the day 132 million gallons of coal slurry and water broke through a holding impoundment constructed by Pittston Coal's Buffalo Mining Co. The breakthrough sent a 20- to 30-foot **TIDAL WAVE** of brackish liquid down through the hollow, leveling nearly everything in its path and killing 125 **INNOCENT VICTIMS**, mostly women and children. Pittston immediately said the tragedy was "an act of God," but the citizens who lived near the impoundment knew differently and fought Pittston's excuse in court. Eventually, three separate commissions studying the disaster found its cause to be Pittston's blatant disregard of standard safety practices.

History nearly repeated itself in October 2000, when just down the road in Martin County, Kentucky, coal slurry broke through the bottom of a holding impoundment into the workings of a mine owned by Martin County Coal Co.—a subsidiary of Massey Energy. While this **TRAGEDY** was not a dam collapse like the Buffalo Creek accident, the Martin County **BREAKTHROUGH** still sent more than 250 million gallons of slurry in to the Big Sandy River's Tug Fork and its tributaries. Thankfully, no one was killed or injured as a result of the accident, but there was great disruption to the communities around the impoundment as the slurry settled, sometimes seven-feet high, in the yards of homeowners. The rivers blackened by the spill have still not fully recovered. Commenting on the accident, one West Virginia DEP official called it "the worst environmental mess I've seen in 22 years," and another expert said it was "the worst **ENVIRONMENTAL DISASTER** ever east of the Mississippi." Ironically, just days after the spill, Massey lawyers were saying the cause of the accident was "an act of God."

Buffalo Creek and Martin County were tragic examples of what can happen when coal slurry impoundments are permitted to grow to such massive sizes that no one—not even the mine owner—is really quite sure whether the holding facility is sound or not. Which brings us to the **BRUSHY FORK** slurry impoundment located in westernmost Raleigh County.


## How sound is the Brushy Fork impoundment?

## Is it another accident waiting to happen?

# Just How SAFE Is The Brushy Fork Impoundment?

***How safe is Marfork Coal Company's Brushy Fork coal waste impoundment? Is there a risk that the earthen dam could rupture or there could be a breakthrough into the mine workings below? These are fair questions that citizens living in communities near the facility deserve an honest answer to. For that reason, the United Mine Workers of America and several local citizen action groups asked respected hydrologist Rick Eades to study the Brushy Fork impoundment and report his findings. Eades, whose clients include the EPA, the Department of Defense and Consol Coal, conducted his study in June 2003, and here's a summary of what he discovered:***

- Brushy Fork is the largest impoundment ever constructed in West Virginia, rising to 954 feet at the top of its earthen dam — or higher than the landmark New River Gorge bridge;

- There have already been numerous documented reports of blackwater releases from the impoundment. In fact, Brushy Fork has been formally cited at least seven times by the West Virginia Department of Environmental Protection (DEP) for un-permitted, off-site discharge;

- Attempts have been made by the DEP to address a 1999 request by the citizens of Whitesville, W.Va., for the agency to offer technical assistance about the size of the impoundment and also long-term concerns about its construction. Today, though, questions still remain;

- The DEP found that water levels are building up in the dam. Measurements showed water built up in the dam repeatedly — and often dramatically — above permitted levels;

- For years, citizens have asked the DEP to require Marfork to conduct seismic monitoring in underground mines. People near Brushy Fork were particularly concerned about the Eagle mine under the impoundment. Were its pillars safe when subjected to blasting and surface mining? How was the Brushy Fork impoundment impacted? In 2001, the monitoring was done, but it's worrisome that Eades was unable to determine if the DEP's Oak Hill office has continued to seismically monitor the Eagle mine since that time.

- The cover of interburden (earth, rock, coal and everything else that lies between the bottom of the Brushy Fork impoundment and the Eagle mine) is not definitely known by direct measurement;

- In hundreds of hours of permit review, no evidence was found that natural fractures in the interburden have ever been studied or quantified in terms of their orientation, spacing or risk factor;

- In an October 2001 meeting between the DEP's mining chief and numerous permit reviewers, inspectors and engineers, all parties admitted that not a single fracture analysis had been required and that none existed;

- Following the Martin County spill in October 2000, Congress directed the National Academy of Sciences to study coal slurry impoundments. Among the many things the NAS reported back was that natural fractures were a significant concern because they create a setting where past breakthroughs may have been exacerbated;

- Based in interviews Eades conducted with DEP permit reviewers in July 2003, there is no evidence that the agency or Marfork are making any attempt to collect data on the natural fractures in material between the impoundment and the mine workings;

- Brushy Fork has been cited by DEP at least 37 times for permit violations. Many of those for blackwater or surface water contamination and runoff;

- Based on interviews Eades conducted with DEP officials at the Oak Hill office, they had never seen any groundwater monitoring data as ordered by the Surface Mine Board, nor had they required it or have any knowledge of such data ever being collected or reported;

- The same engineers who were principal engineers responsible for overseeing safe construction operations at Martin County Coal (at the time of the 2000 massive spill) — are the same engineers Marfork is employing at the Brushy Fork facility; and

- The evacuation plan prepared for citizens by Marfork and its representatives directs many people who have to flee the area to drive upstream along the Coal River for several miles and exit the area via Route 3. This means people evacuating are driving towards the impoundment, directly into the path of any release that occurred!